

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

1. (Currently Amended) A method for manufacturing a semiconductor physical quantity sensor of electrostatic capacitance type, in which mutually facing peripheral bonding areas of an insulating substrate and a semiconductor substrate are contacted for anodic bonding, while both substrates have an anodic bonding voltage applied therebetween so as to be integrated by anodic bonding, with a fixed electrode being formed on a bonding face-side surface of the insulating substrate, and with a movable electrode being formed on a bonding face-side surface of the semiconductor substrate,

the method comprising:

forming, before the anodic bonding, an equipotential wiring to short-circuit the fixed electrode to the movable electrode on the bonding face-side surface of the insulating substrate inside the bonding area, and to be prevented from being directly sandwiched between the both substrates, in which all of the fixed electrode, the movable electrode, the bonding face-side surfaces of the insulating substrate and the semiconductor substrate, and the equipotential wiring are placed inside the bonding area;

performing the anodic bonding; and

cutting and removing the equipotential wiring after the anodic bonding in which the equipotential wiring is cut by a laser irradiation allowed to pass through from the insulating substrate.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The method for manufacturing a semiconductor physical quantity sensor of electrostatic capacitance type according to claim 1 [[2]], wherein in the forming, the equipotential wiring has a reduced wiring width at a cutting location thereof.

5. (Currently Amended) A method for manufacturing a semiconductor physical quantity sensor of electrostatic capacitance type, in which mutually facing peripheral bonding areas of an insulating substrate and a semiconductor substrate are contacted for anodic bonding, while both substrates have an anodic bonding voltage applied therebetween so as to be integrated by anodic bonding, with a fixed electrode being formed on a bonding face-side surface of the insulating substrate, and with a movable electrode being formed on a bonding face-side surface of the semiconductor substrate,

the method comprising:

forming, before the anodic bonding, an equipotential wiring to short-circuit the fixed electrode to the movable electrode on the bonding face-side surface of the semiconductor substrate inside the bonding area, and to be prevented from being directly sandwiched between the both substrates, in which all of the fixed electrode, the movable electrode, the bonding face-side surfaces of the insulating substrate and the semiconductor substrate, and the equipotential wiring are placed inside the bonding area;

performing the anodic bonding; and

cutting and removing the equipotential wiring after the anodic bonding in which the equipotential wiring is cut by a laser irradiation allowed to pass through from the insulating substrate.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The method for manufacturing a semiconductor physical quantity sensor of electrostatic capacitance type according to claim 5 [[6]], wherein in the forming, the equipotential wiring has a reduced wiring width at a cutting location thereof.

9. (Currently Amended) A semiconductor physical quantity sensor of electrostatic capacitance type, in which mutually facing peripheral bonding areas of an insulating substrate and a semiconductor substrate are contacted for anodic bonding, while both substrates have an anodic bonding voltage applied therebetween so as to be integrated by anodic bonding, with a fixed electrode being formed on a bonding face-side surface of the insulating substrate, and with a movable electrode being formed on a bonding face-side surface of the semiconductor substrate, wherein:

an equipotential wiring to short-circuit the fixed electrode to the movable electrode is formed on the bonding face-side surface of the insulating substrate or the semiconductor substrate inside the bonding area so as to be prevented from being directly sandwiched between the both substrates, with all of the fixed electrode, the movable electrode, the bonding face-side

surfaces of the insulating substrate and the semiconductor substrate, and the equipotential wiring being placed inside the bonding area; and

the equipotential wiring has such a structure that can be cut by applying, to the equipotential wiring, a laser irradiation passing through from the insulating substrate a laser irradiation or a current to the equipotential wiring after the anodic bonding.

10. (Cancelled)

11. (Cancelled)